

245,847 PROVISIONAL SPECIFICATION

1 SHEET

*[This Drawing is a full-size reproduction of the Original.]*

Fig. 1

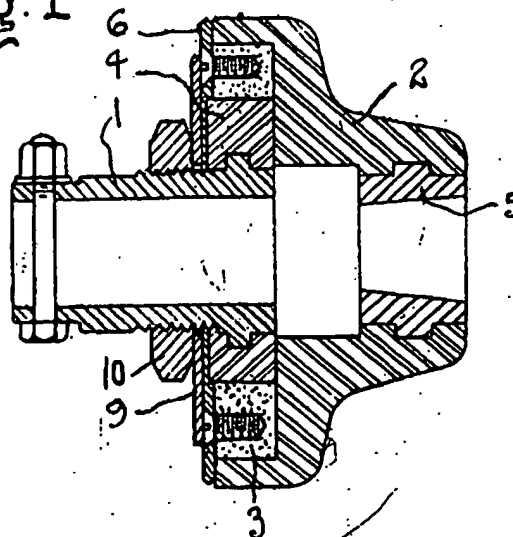
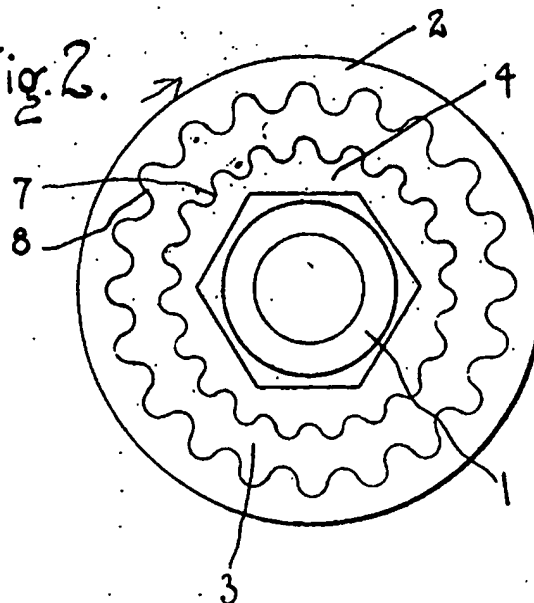


Fig. 2.



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Dir 45  
Ep 6/1

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PATENT SPECIFICATION



Application Date: Oct. 15, 1924. No. 24,488/24.

245,847

(Patent of Addition to No. 239,317: July 8, 1924.)

Complete Left: July 15, 1925.

Complete Accepted: Jan. 15, 1926.

PROVISIONAL SPECIFICATION.

Improvements in and relating to Shaft Couplings.

We, THE BRITISH THOMSON-HOUSTON COMPANY, LIMITED, a British company, having its registered office at Crown House, Aldwych, London, W.C. 2, and ALBERT GEORGE SALISBURY, of "Dove-dale", Priory Road, Kenilworth, in the County of Warwick, a British subject, do hereby declare the nature of this invention to be as follows:—

10 In Specification No. 239,317, we have described a shaft coupling wherein a member which is adapted to connect members secured to the shafts is so arranged that the shafts can be  
15 engaged and disengaged by longitudinal movement of the said connecting member without necessitating any relative longitudinal movement of the shaft members. In an arrangement  
20 which we described the connecting member took the form of a disc provided on one face with projections which engaged with corresponding recesses in the shaft members.

25 Our present invention is a modification of the invention described in the above provisional specification and consists in forming the connecting member of a ring having both internal and  
30 external teeth, the external teeth engaging with one shaft member and the internal teeth with the other shaft member. The number of internal teeth may be made different to the number of  
35 external teeth so as to provide a vernier adjustment for the shaft.

In the accompanying drawing, which illustrates our invention, Fig. 1 is a side sectional elevation of the coupling and  
40 Fig. 2 is an end sectional view shewing

the internal and external teeth on the connecting member.

Referring to the drawing, 1 and 2 represent the shaft members and 3 represents the connecting member. The shaft member 1 is moulded into moulded material 4, whilst shaft member 2 consists of moulded material having a metal insert 5. The connecting member 3 consists of rubber compound or any other suitable material, rubber being preferred by reason of its flexibility, moulded into a metal washer 6 which is made of such a shape as to enable the connecting member to be readily removed sideways. The member 3 has internal and external teeth 7 and 8, respectively, adapted to engage in corresponding recesses in the moulded material 4 and the shaft member 2. The number of internal teeth 7 is made different from the number of external teeth 8 so as to provide a vernier adjustment for the two shafts. A washer 9 and nut 10 are adapted to retain the metal washer 6 and the connecting member 3 in position. In order to make any desired adjustment between the two shaft members of the coupling, it is only necessary to slacken back the nut 10, when the connecting member 3 can be removed sideways so as to be free of both shaft members without disturbing either of them. After making the adjustment the connecting member can be readily replaced in its former position.

Dated this 10th day of October, 1924.

JOHN GRAY,  
Crown House, Aldwych, London, W.C. 2,  
Agent for the Applicants.

[Price 1/-]

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## COMPLETE SPECIFICATION.

## Improvements in and relating to Shaft Couplings.

We, THE BRITISH THOMSON-HOUSTON COMPANY, LIMITED, a British company, having its registered office at Crown House, Aldwych, London, W.C. 2, and  
 5 ALBERT GEORGE SALISBURY, of "Dove-dale", Priory Road, Kenilworth, in the County of Warwick, a British subject, do hereby declare the nature of this invention and in what manner the same  
 10 is to be performed, to be particularly described and ascertained in and by the following statement:—

In the Patent Specification No. 239,317 we have described & claimed a shaft  
 15 coupling wherein a member which is adapted to connect members secured to the shafts is so arranged that the shafts can be engaged and disengaged by longitudinal movement of the said connecting  
 20 member without necessitating any relative longitudinal movement of the shaft members. In an arrangement which we described the connecting member took the form of a disc provided on one face with  
 25 projections which engaged with corresponding recesses in the shaft members.

Our present invention is a modification of the invention described in the above patent specification and consists in providing the connecting member with a  
 30 cylindrical extension having both internal and external teeth, the external teeth engaging with one shaft member and the internal teeth with the other shaft  
 35 member. The number of internal teeth may be made different to the number of external teeth so as to provide a vernier adjustment for the shaft.

In the drawing left with the provisional specification, which illustrates our invention, Fig. 1 is a side sectional elevation of the coupling and Fig. 2 is an end sectional view shewing the  
 40 internal and external teeth on the connecting member.  
 45 Referring to the drawing, 1 and 2 represent the shaft members and 3 represents the connecting member. The shaft member 1 is moulded into moulded

material 4, whilst shaft member 2 consists of moulded material having a metal insert 5. The connecting member 3 consists of rubber compound or any other suitable material, rubber being preferred by reason of its flexibility, moulded onto a metal washer 6 which is made of such a shape as to enable the connecting member to be readily removed sideways. The member 3 has internal and external teeth 7 and 8, respectively, adapted to engage in corresponding recesses in the moulded material 4 and the shaft member 2. The number of internal teeth 7 is made different from the number of external teeth 8 so as to provide a vernier adjustment for the two shafts. A washer 9 and nut 10 are adapted to retain the metal washer 6 and the connecting member 3 in position. In order to make any desired adjustment between the two shaft members of the coupling, it is only necessary to slacken back the nut 10, when the connecting member 3 can be removed sideways so as to be free of both shaft members without disturbing either of them. After making the adjustment the connecting member can be readily replaced in its former position.

Having now particularly described and ascertained the nature of our said invention and in what manner the same is to be performed, we declare that what we claim is:—

1. A shaft coupling as claimed in Patent No. 239,317, in which the sets of projections on the intermediate ring are arranged radially on a cylindrical extension thereof, one set on the outside and the other set on the inside of the cylindrical extension.

2. A shaft coupling as claimed in Claim 1, in which the extension with the projections thereon is of resilient material moulded on to the connecting ring.

Dated this 15th day of July, 1925.

JOHN GRAY,

Crown House, Aldwych, London, W.C. 2,  
 Agent for the Applicants.